

September 1, 2006

Senator Tom Coburn, M.D.  
439 Hart Senate Office Building  
Washington, D.C. 20510

**Steven B. Sample**

President and  
Robert C. Packard  
Professor

Via facsimile: (202) 228-3796

Dear Senator Coburn:

Thank you for your letter of July 27, 2006, requesting information on the appropriations the University of Southern California (USC) has received from Congress. I am pleased to provide you with this information.

In the 20<sup>th</sup> century, American leadership was at the forefront of global events and global economics. We have been on the cutting-edge of innovation, from Henry Ford's assembly-line cars to mapping the human genome. The high caliber of U.S. research in universities, industry, and government labs can only be maintained if we continue to train and inspire premier scientists and engineers. One quarter of the current research workforce is over fifty years old, moving inexorably toward retirement. Since 1998, the number of doctorate degrees in science and engineering fields awarded by U.S. institutions has fallen. In China, for example, engineering degrees comprise 38.6 percent of all undergraduate degrees; compare that to 4.7 percent in the United States.

The top 70 research universities in the United States produce more than 90 percent of America's doctoral students. As one of these universities, we are proud to supply the doctoral researchers who drive innovation in science and technology in national research laboratories, private industry, federal and state government agencies, and universities.

Now, more than ever, we must develop a workforce that is educated and technically savvy. We must invest substantially in research and development – in universities, industry, and government laboratories. We must encourage industry to take risks. And we must recognize that the production of knowledge is itself an industry. With more nations becoming expert in generating knowledge and spawning innovations, we have to ask: "How well prepared is the U.S. to maintain its leadership in the new millennium?"

Other countries are also poised to challenge the global economic order by expanding in the burgeoning fields of biotechnology, optics, and nanotechnology. Increasing government support of academic science and engineering research is a vehicle to advance U.S. dominance in discovery and innovation. Rival nations recognize this support as a vital investment. For example, Sweden, Finland,

Israel, Japan, and South Korea each spend more on R&D as a share of GDP than the U.S. We are lining up *behind* them, and that is not a formula for success in the 21st century.

The University of Southern California is responding to this challenge by producing a steady stream of educated citizens and by generating significant new knowledge. We succeed in these vital tasks in part because of our \$430 million in annual research expenditures, of which \$338 million comes from federal government agencies. Virtually all of this federal funding comes via the competitive, merit-based process that exists at such agencies as the National Institutes of Health, the National Science Foundation, and the U.S. Department of Defense.

On limited occasions, USC has sought the assistance of its Congressional delegation for support on specific projects for which no established federal program currently exists and when such support would enable the university to make a unique contribution in an area vitally important to the nation. In those limited circumstances, the university may use a consultant to supplement our own direct interactions with Congress.

For example, between fiscal years 2004 and 2006, our Congressional delegation secured more than \$2 million for research to advance surgical robotics with cardiovascular and neurosurgical applications. We received approximately \$3 million in Congressional support for our efforts to build a state-of-the-art neurogenetics center between fiscal years 2002 and 2004 and more than \$1 million for an innovative biomedical device center in fiscal years 2001 and 2002.

USC continues to rapidly expand its research prowess through a strategy that advances the state of knowledge in traditional science and engineering disciplines while also emphasizing collaboration across multiple disciplines and meeting societal needs, such as:

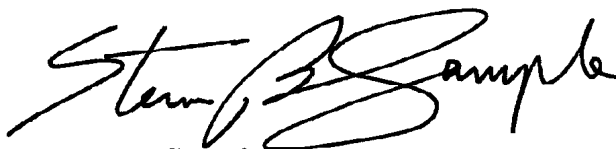
- Preventing, detecting and curing diseases prior to causing human harm;
- Capturing and distributing energy supplies that are environmentally benign, economical and long-lasting;
- Securing the nation and the world against the risk of both natural disasters and intentional acts of terrorism;
- Enhancing cross-cultural understanding and cooperation through communication among civic, religious, ethnic, and community institutions; and
- Creating the means to educate both our children and adults for a deeper understanding of science and math, languages and cultures, leadership, and justice.

Speeding the transfer of scientific breakthroughs to the marketplace to ensure they benefit society, spur the creation of new products and services that contribute to a high quality of life for Americans, and develop and expand economic activity by U.S. businesses at home and abroad.

The university has developed a set of strategic initiatives that fosters collaboration among students and faculty from all of our disciplines. We invest in each initiative, in support of core laboratory facilities, exceptional new faculty, and start up of new research and educational programs.

In your letter, you said many institutions play a significant role in the "process of fostering the ideas, supporting the individuals, and conducting the research that often translates into life-changing innovations and discoveries." I could not agree more strongly, and I hope that you and your colleagues will continue to provide vigorous support for the federal research and development enterprise so that the university community can continue in our efforts to contribute to the nation's long term health and well being.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven B. Sample". The signature is fluid and cursive, with the first name "Steven" and last name "Sample" clearly distinguishable.

Steven B. Sample  
President